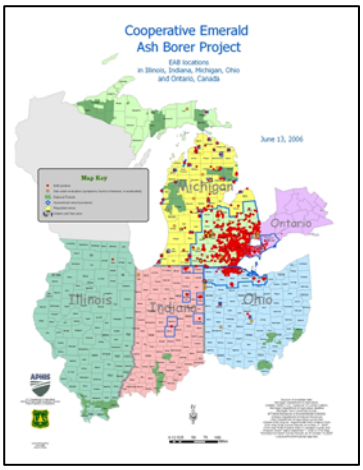
SCR & SER Forest Health Update
Wisconsin DNR, Forest Health Protection Unit
July 14, 2006 Vol. 3 No. 3

Topics in this update

Breaking news - Second EAB case found in Illinois

Another site that is infested with the Emerald Ash Borer (EAB) was recently found in Kane County, Illinois. An EAB adult beetle was found in the yard of a home in Wilmette, a north suburb of Chicago. A resident discovered the beetle and reported to the authority. Several infested trees were also found at the site, and an initial survey of a five-block area revealed 16 trees exhibiting symptoms of EAB infestation. A more extensive survey will follow to assess the full extent of the infestation.



Emerald Ash Borer Specials - Renee Pinski

Emerald Ash Borer Found in Illinois: Follow-up survey update

Emerald ash borer infested ash trees were discovered near Lily Lake, Illinois (Kane County), just west of Chicago and 40 miles south of the Wisconsin border last month. This infestation is the first to be discovered in Illinois and is the closest known infestation to Wisconsin. Upon initial investigation, the infestation is thought to be 3-6 years old given the extensive damage to the trees identified so far. It appears that there have been several generations of emerald ash borer feeding. Initially, four properties with six trees were identified as infested by emerald ash borer. Since the discovery, delimiting surveys (visual inspection only) suggest that the emerald ash borer has not spread beyond the limits of the subdivision. However, more surveys are to follow, when the Illinois Department of Agriculture will begin peeling the bark of trees that show signs of being infested by emerald ash borer.

Just how the emerald ash borer arrived in this Illinois subdivision is unknown. The neighborhood is about 30 years old with well established trees and there doesn't seem to be any recent nursery planting to account for an introduction. Could it possibly have hitched a ride in firewood? Some of the subdivision's residents are known to have summer homes in MI and may have possibly brought firewood back in the past.

Educating the public on and increasing their awareness for the emerald ash borer most likely helped bring this infestation to light. The homeowner reporting the finding, sensitized by local TV and radio news spots, went to a website when she saw the beetles flying around. The website in turn gave her the instructions on how to report emerald ash borer.

Emerald Ash Borer Silvicultural Guidelines in progress

The silvicultural committee is currently discussing and putting together a draft of silvicultural guidelines for ash management in light of the eminent arrival of the emerald ash borer. The committee plans on having the guidelines established by the end of the year 2006. Stay tuned, as there will be more information available on this topic as the deadline approaches.

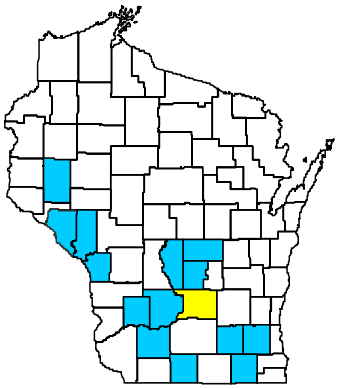
Emerald Ash Borer DNR Survey Update

Visual surveys are continuing in private campgrounds in south-central and central Wisconsin. As of 6/29/06 no emerald ash borer infestations have been detected in Wisconsin.

Detection tree surveys are now underway. Detection trees have been constructed and are being monitored throughout 28 of Wisconsin's state park and forest properties (see table). These properties were chosen based on their ash resource and the number of visitors that originate from areas that have emerald ash borer. As of 6/29/06 no emerald ash borer infestations have been detected.

Park or Forest	County
Amnicon Falls	Douglas
Big Bay	Ashland
Big Foot Beach	Walworth
Blue Mound	Iowa/Dane
Copper Falls	Ashland
Devil's Lake	Sauk
Governor Dodge	Iowa
High Cliff	Calumet
Interstate	Polk
Kettle Moraine Northern Unit - Long Lake	Fond du Lac
Kettle Moraine Northern Unit - Mauthe Lake	Fond du Lac
Kettle Moraine Southern Unit - Ottawa Lake	Waukesha
Kohler-Andrae	Sheboygan
Lake Kegonsa	Dane
Lake Wissota	Chippewa
Merrick	Buffalo
Mirror Lake	Sauk
Nelson Dewey	Grant
Pattison	Douglas
Peninsula	Door
Perrot	Trempealeau
Pike Lake	Washington
Point Beach	Manitowoc
Potawatomi	Door
Richard Bong	Kenosha
Rocky Arbor	Juneau/Sauk
Wildcat Mtn.	Vernon
Willow River	St. Croix
Wyalusing	Grant
Yellowstone Lake	Lafayette

Annosum root rot found in Columbia County



Counties where Annosum root rot is confirmed.

Annosum root rot was confirmed in Columbia County for the first time. The keen observations of a veteran forester, Jim Bernett, led to this finding. Infection was found on a 47-year old red pine plantation in the township of Fort Winnebago (T13N R9E Sec. 15). Active fruit bodies were found on a live tree with thin crown as well as recently killed trees. The plantation was last thinned in 2001. It is suspected that fresh stumps were infected with Annosum root rot after thinning, and the disease has spread to nearby trees through root contact.

Annosum root rot was first found in Wisconsin in 1993. Currently, Annosum root rot is confirmed in 15 Counties.

Annosum root rot is caused by the fungus, *Heterobasidion Annosum*. It is considered as one of the most serious diseases of conifers in the north temperate regions of the world. In Wisconsin, the disease is most commonly seen on red and white pines. For more information about Annosum root rot, please visit the DNR Forestry website at http://dnr.wi.gov/org/land/Forestry/Fh/fhissues/annosum.htm (the county distribution map in the website needs to be updated).

Oak wilt starting to show up

A red oak tree that has started to show wilting symptoms of oak wilt (the picture was taken on July 14)

The first signs of oak wilt have begun to appear in infected trees. Oak wilt is a fungal disease that plugs the water and nutrient conducting channels in the tree. It is a serious disease of oak, especially in the red oak group. In the red oak group, once wilting symptoms become visible, the tree loses most of the leaves and dies very quickly, often within a few weeks. This disease is commonly found in the southern two-thirds of Wisconsin

The first symptoms of oak wilt are branches with wilted leaves and leaves on the ground in summer. These fallen leaves are partially green or a bronze-green and are not completely dry. Landowners who have an oak tree that is rapidly losing its leaves may want to have the tree examined for oak wilt. Homeowners who suspect oak wilt can send branch samples that have wilting leaves to the University of Wisconsin, Plant Disease Diagnostics Clinic for oak wilt laboratory test. The samples should be roughly 1/2-inch in diameter and 4 to 6-inches long from three different branches with wilting leaves. The samples must have live tissue.

Details for submitting samples are available on the Internet at http://www.plantpath.wisc.edu/pddc/ or by calling the University of Wisconsin's Plant Disease Diagnostic Clinic at 608-262-2863. For more information about oak wilt biology and management, please visit the Wisconsin DNR website at http://dnr.wi.gov/org/land/Forestry/Fh/oakWilt/index.htm.

Elm leaf miner - Dave Hall, retired DNR forest entomologist

The elm leaf miner was observed in Green County and western Dane Co. The damage peaked in early June when severely infested leaves were dropping. We see it nearly every year here. It is

worse in heavy seed years. The elms produce seeds first then produce foliage. The individual trees with heavy seed crops have delayed leaf development and small leaves. These late developing leaves are usually the most heavily damaged by the leaf miner. This year's red elm seed crop was spotty -- a few, individual trees had very heavy seed crops. Overall, I would describe this year's leaf miner damage as light.

Dave, thank you for your report on this pest!

Oystershell scale - Shane Lishawa

The oystershell scale (*Lepidosaphes ulmi*) is a common scale insect found on a wide variety of tree hosts. The insect injures plants by piercing the bark with its sucking mouthpart and feeding on cellular tissue. Infestations often go undetected due to the insect's small size, around 2.5 mm, and its camouflage coloring. Damage caused by infestation is typically limited to mortality of individual branches, however entire trees will occasionally succumb.

A close-up of adult female (photo taken by S.Lishawa)

A dying green ash in Madison resulting from oystershell scale insects encrusting an ash stem. (photo taken by S.Lishawa)

A population of oystershell scale was discovered in Dane County, where several urban green ash trees are in precipitous decline and more than 20 other ash trees have lost numerous branches due to the extensive infestation.

Gypsy moth update - Mark Guthmiller

Though there are some struggling caterpillars, most of the caterpillars have pupated. There are some reports of adult moths emergence and egg laying in southern Wisconsin.

Pine spittlebug infestation on white pine

A pine spittlebug frothy spittle mass on white pine needles (photo taken on June 28, 2006)

An increased population of the pine spittlebug (*Aphrophora cribrata*) was observed in the Kettle Moraine State Forest, Southern Unit, in June. Frothy spittlemasses were prominent on the shoots of understory white pines. Both nymphs and adults suck sap of the host trees and weaken them. Trees that are heavily infested for several years show reddened tips of shoots. Repeated years of heavy infestation could kill a tree. The pine spittlebug attacks pines, especially Scotch, Austrian, white, and jack pines, and to a lesser extent, larch, fir, hemlock, and spruce. Molting to the adult was observed on June 28 (photo on the right). Adults are seen from mid-June to mid-September. The pine spittlebug has only one generation per year. The report of increased pine spittlebug infestation came from a SER forester, Mike Sieger. Mike and Jo, thank you for reporting and taking me to the site!

Molting to the adult by hanging upside down. Wings are out, and the adult is about to emerge from the skin. (photo taken on June 28, 2006)

New staff member to Forest Health Protection Unit

WI DNR Forest Health Protection Unit welcomes a new member, Tracy Schilder, for this summer. She has already started her job, conducting a visual survey to detect the Emerald Ash Borer in private campgrounds in central and southern Wisconsin. She conducted a similar EAB survey for a project sponsored by the University of Wisconsin last summer. She recently graduated from the University of Wisconsin-Parkside, with a major in biology and a minor in environmental studies. Wecome aboard, Tracy!

Other pests reported

Pecan Spittlebug - Infestation on mature walnut trees was observed in Lafayette County. White foamy spittle masses were seen on the leaves. The report came from a DNR forester, Matt Singer. Thank you, Matt.

Oak apple galls - Round green and tan galls were found on oaks in Walworth County. Galls are caused by a synipid wasp. Each gall contains a single larva inside. An adult wasp was found in a gall on June 28.

Please report to us

We appreciate reports of forest health problems in your areas. Currently, there is no regional forest health specialist assigned in SCR or SER. At this point, please contact the following staff for regional forest health problems/questions. Thank you.

For general forest health issues

Jane Cummings-Carlson (northern part of SER)	608-275-3273
Kyoko Scanlon (southern part of SER, and SCR)	608-275-3275

For gypsy moth

Andrea Diss (Statewide issues)	608-264-9247
Mark Guthmiller (SCR/SER)	608-275-3223

Emerald ash borer hotline	1-800-462-2803
Gypsy moth hotline	1-800-642-MOTH

Forest Health web site: http://www.dnr.state.wi.us/org/land/forestry/FH/
Gypsy Moth web site: http://www.gypsymoth.wi.gov

About the newsletter

"SCR & SER Forest Health Update" is an informal newsletter created by the Wisconsin DNR, Forest Health Protection Unit. The purpose of this newsletter is to provide foresters in the South Central Region and Southeastern Region with regional up-to-date forest health information. This newsletter will be issued monthly during the growing season and on an irregular basis during winter as topics come up. We welcome your comments/suggestions on this newsletter and your reports on forest health problems you observed in your area. If you would like to subscribe to this newsletter, please contact Kyoko Scanlon at Kyoko.Scanlon@dnr.state.wi.us.

Previous issues of this update and regional forest health updates from NER and WCR are available from the WI DNR Forestry website at http://dnr.wi.gov/org/land/Forestry/FH/intheNews/index.htm.

Articles were written by Kyoko Scanlon, unless otherwise noted.